

THIS MONTH

It isn't quite as cheap as the mythical \$100 laptop that has been promised recently, but Asus's Eee PC 701 (reviewed on page 26) comes pretty close. At £211 including VAT, it's amazingly affordable and is one of the most portable laptops we've seen, weighing less than 1kg. It even includes a webcam and wireless networking, so you can keep in touch almost wherever you are.

Prices of LCD monitors are still falling steadily, but BenQ throws down the gauntlet to other manufacturers with its 24in G2400WA (reviewed on page 41). It offers a 'full HD' resolution of 1,920x1,200, yet costs only £230 – almost half the price of its nearest rivals.

So-called green PCs are becoming a fashionable addition to manufacturers' ranges, and this month we put VeryPC's power-efficient PC to the test. It's smaller than a regular desktop PC and claims to use considerably less energy than a normal computer. But can a PC really be green? Find out on page 31.

Jim Martin
Reviews Editor



jim@computershopper.co.uk

SONY

Vaio VGN-CR21E

★★★

£899 inc VAT

From www.sonymstyle.co.uk

We see a lot of very similar-looking laptops at *Shopper*, so it's always refreshing to open a box and see something different. Sony's Vaio CR21E is a case in point. It's up to Sony's usual stylish standards, with sleek, rounded edges. It sits elegantly on a desk and definitely stands out from the crowd. Our review model was white, but it's also available in blue or pink for the same price, but if you want red or gold it'll cost you an extra £100.

Another reason this laptop stands out is its unusual 14.1in screen, which means it is slightly more compact than the 15.4in models we see every month. At 2.8kg, though, it isn't much lighter than most 15.4in laptops.

Inside the chassis there's a 2GHz Intel Core 2 Duo T7250 processor and 2GB of RAM, which should be fast enough for most applications you care to throw at it. This is backed up by our benchmark results. The video-encoding score of 216 was impressive, but the integrated Intel X3100 graphics failed to run our Call of Duty 2 graphics test, making the CR21E unsuitable for playing modern 3D games. Battery life is above average at four hours and 13 minutes.



▲ We found the CR21's flat, widely spaced keys a little uncomfortable to type on

This month What's New Contents

					
PC Systems & Laptops page 24	Printers & Scanners page 36	Photography page 42			
Asus Eee PC 701 ★★★★★	Canon PIXMA iP4300 ★★★★★	Canon EOS 400D ★★★★★			
CCL Duo4400-CSP ★★★★★	Canon PIXMA MP520 ★★★★★	Canon PowerShot A570 IS ★★★★★			
PC Nextday Zoostorm 4-5628 ★★★★★	Dymo Cardscan Personal V8 ★★★★★	Fujifilm FinePix F20 ★★★★★			
RL Supplies Modula 4400 OC ★★★★★	Epson Stylus Photo R285 ★★★★★	Fujifilm FinePix S8000FD ★★★★★			
Samsung Q45 ★★★★★	HP Photosmart D7460 ★★★★★	Nikon Coolpix P5100 ★★★★★			
Sony Vaio VGC-LT1S ★★★★★	IRIS IRISScan Pro 4 ★★★★★	Olympus SP-560 UZ ★★★★★			
Sony Vaio VGN-CR21E ★★★★★	Lexmark X4550 ★★★★★	Panasonic Lumix DMC-FX33 ★★★★★			
VeryPC GreenPC 940 BE ★★★★★	Lexmark Z1320 ★★★★★	Panasonic Lumix DMC-FZ18 ★★★★★			
Handhelds page 34	Samsung ML-1630 ★★★★★	Pentax Optio A30 ★★★★★			
Archos 405 ★★★★★	Samsung ML-2510 ★★★★★	Video page 46			
Nokia E65 ★★★★★	Displays page 40	Canon HG10 ★★★★★			
Palm Treo 500v ★★★★★	AG Neoovo K-A19 ★★★★★	Canon HV20 ★★★★★			
Sony Ericsson K850i ★★★★★	BenQ G2400WA ★★★★★	Canon MD101 ★★★★★			
T-Mobile Sidekick Slide ★★★★★	HannsG HW223DP ★★★★★	Sanyo Xacti VPC-HD1000 ★★★★★			
TomTom Go 720 ★★★★★	Iiyama ProLite X486S-B1 ★★★★★	Sling Media Slingbox Classic ★★★★★			
	LG 37LC55 ★★★★★	Terratec Cinergy DT USB XS Diversity ★★★★★			
	LG Flatron L226WTQ ★★★★★				
	Samsung SyncMaster 245B ★★★★★				
	Toshiba Regza 32C3030 ★★★★★				



There's a 160GB hard disk for storing your files and a two-layer DVD writer for backing them up. Wireless 802.11a/b/g networking comes as standard, but Bluetooth is included only in this £899 CR21E version, not in the cheaper CR21S, which costs £100 less, so be clear about which model you're looking at before you buy. There's also a built-in 1.3-megapixel webcam. Windows Vista Home Premium is preinstalled.

The glossy screen has a 1,280x800 resolution. Although it's marginally lighter at the bottom, it's not a major problem and is bright and otherwise evenly lit. As with most laptops, the internal speakers lack bass but are otherwise good. They have plenty of volume and only distort when both Windows Media Player and Windows itself are at full volume.

The keyboard is robust and has a stylish silver finish, but because the keys are flatter than most laptops and have gaps between them, it took a bit of getting used to. The trackpad is decent, but the

buttons need a firmer push than we'd ideally like. Considering the other Vaios that we have seen, the CR21E's ergonomics are a little disappointing.

Sony's Vaio CR21E is a very stylish laptop and it is a decent performer, but the keyboard is an example of style over substance. The other problem is the price. There are lots of alternatives with similar specifications for a lot less than £899; Samsung's Q45 (see 'Also consider...', page 27), for example, costs just £731.

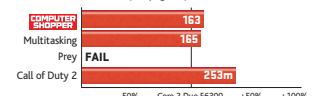
Matt Smith

SUMMARY

- ✓ Decent battery life
- ✓ Stylish and sleek
- ✗ Poor keyboard design

LAPTOP PC 2GHz Intel Core 2 Duo T7250, 2GB RAM, 160GB hard disk, Intel Graphics Media Accelerator X3100 graphics, DVD+/-RW +/-DL, 14.1in widescreen LCD, 2.8kg
PART CODE VGN-CR21E/W.CEK
DETAILS www.sonymstyle.co.uk

PERFORMANCE (see page 66)



PC SYSTEMS & LAPTOPS

FAQ

Q Can I buy a computer with Windows XP pre-installed rather than Vista?

A Most PCs and laptops now come with Vista pre-installed, but you may want XP instead if you have software and peripherals that aren't compatible with Vista.

Microsoft had originally planned to stop selling XP on 31st January 2008, but this deadline has been extended to 30th June 2008. Some PC manufacturers, such as Dell, sell computers with XP pre-installed. Others ship with Vista pre-installed and an XP 'downgrade' disc in the box. Some retailers, including www.laptopsdirect.co.uk, will sell computers with XP pre-installed rather than Vista, but for a fee.

You can buy XP Home, Professional and Media Center, but if you want to install XP over Vista on a new PC, ensure you have all the appropriate drivers for the hardware.

Alan Lu

PC systems and storage expert



alan@computershopper.co.uk



Audio page 48

Alba PRDAB210MP3	★★★★★
Apple iPod Nano	★★★★★
Audioengine A2	★★★★★
Creative Zen	★★★★
Hercules XPS 2.1 Lounge	★★★★★
iRhythms A-211	★★★★★
Logitech X-230	★★★★★
Samsung YP-T9	★★★★★
Sandisk Sansa e280	★★★★★
Shure SE110	★★★★★
Sony Walkman NWZ-A815	★★★★

Networks page 52

Buffalo WBRM-G125	★★★★★
D-Link Rangebooster 1353	★★★★
Linksys WAG325	★★★★★
Sweetex M0200UK	★★★★
Trendnet TEW-633GR	★★★★

Storage page 54

Buffalo DriveStation TurboUSB 500GB	★★★★★
Cooler Master X-Craft 360	★★★★★
Fujitsu HandyDrive 300GB	★★★★★
LaCie d2 eSATA II 3Gbits Hard Drive 500GB	★★★★★
Linksys NAS200	★★★★
Seagate Barracuda 7200.10 Ultra ATA/100 500-GB Hard Drive	★★★★★
Western Digital Scorpio 250GB	★★★★★

Components page 56

Aopen MP965-DR	★★★★★
Cooler Master Hyper TX 2	★★★★★
EVGA 8800GTS ACS3	★★★★★
Gigabyte iSOLO Z10	★★★★
Intel Core 2 Duo E6750	★★★★★
Sapphire X1950 Pro	★★★★★
Shuttle XPC Glamour SN68PTG6 Deluxe	★★★★★

Software & Games page 58

Acronis True Image 10 Home	★★★★★
Adobe Creative Suite 3 Design Premium	★★★★★
Adobe Photoshop Lightroom 1.0	★★★★★
Ahead Nero 8	★★★★
Ancestry Family Tree Maker 2008 Platinum Edition	★★★★
Avanquest Who do you think you are?	★★★★★
Call of Duty 4	★★★★★
Crysis	★★★★★
DivX Author	★★★★
LogiMein Pro	★★★★★
Nova Development Greeting Card Factory Deluxe 6	★★★★★
Nsure nsure:Express	★★★★
OpenOffice OpenOffice.org 2.1	★★★★★
The Orange Box	★★★★★
Roxio Easy Media Creator 10	★★★★★
Steganos AntiVirus 2007	★★★★★
The Witcher	★★★★
X-OOM Movies on TomTom	★★★★

BYTE SIZE

BELKIN Swivel Hub

★★★★★

£13 inc VAT

From www.lambda-tek.com/componentsshop

Belkin's Swivel Hub is designed to appeal to anyone who needs to cram more USB devices on to a laptop without being limited by the number of ports.

This four-port hub can be adjusted into various positions to prevent it blocking nearby ports. However, the ports on the hub itself are too close together to allow two or more normal-sized flash drives to be plugged in next to each other.

The hub swivels into position with a satisfying click, but it feels a touch flimsy. It can act as a powered hub when you plug in its mains adaptor, or an unpowered one if you don't have a mains connection available. It's good value for £13 including VAT.

Kat Orphanides

DETAILS: www.belkin.com/uk



PAKUMA Choroka K3LT

★★★★★

£54 inc VAT

From www.ebags.co.uk

This cheery laptop bag evokes memories of the classic Mini

Cooper's bonnet stripes. The shiny red tarpaulin-style fabric is waterproof, and the clever design of the main flap overlaps the zips. A small, external rear pocket gives access to smaller items.

Laptops up to 14.1in are well protected but we found that 15.4in models were a tight fit. There are lots of extra pockets of varying sizes inside for storing bits and pieces.

The strap is adjustable and has a big shoulder pad. It also has an stabiliser strap for cyclists. It's a great bag if you need to carry a small laptop around, and better still if you're a big Mini fan.

Seth Barton

DETAILS www.pakuma.co.uk



ASUS

Eee PC 701

★★★★★

£209 inc VAT

From www.pcwb.com


It's hard to believe that Asus's new Eee PC 701 costs just over £200, especially as it's an ultraportable laptop, which would normally command a premium. But this tiny marvel has a 7in screen and weighs less than a kilogram. It's aimed at anyone who needs a portable computer, or simply wants to spend as little as possible; you can't even buy an entry-level PC at this price.

But how good can a laptop be for this amount of money? First impressions were excellent. The display is surprisingly good; the 800x480 resolution works well on the 7in diagonal. The keys on the keyboard are very small, and although those with larger digits will struggle not to hit adjacent keys until they get used to it, they're the perfect size for children. The trackpad is accurate, but with all the icons being so small, we initially found it difficult to make the cursor stay on one icon while we clicked the trackpad button. A quick delve into the settings menu allowed us to change the sensitivity and make it easier to control. The only real issue is with the trackpad buttons. There's a single piece of plastic covering both buttons, which makes it too easy to press the wrong side.

The Eee PC is built to withstand being carried anywhere. The screen doesn't flex, the keyboard feels tough and it should survive the occasional knock without faltering. One of the reasons for this is the use of a solid state hard disk, rather than a fragile mechanical one. The downside is that it has a capacity of only 4GB, of which 2.3GB is occupied by the operating system. It's also the reason why there are no benchmark results in this review: after installing Windows XP, there was no room for our test files.

Few other corners are cut, although it's worth noting the absence of a CD or DVD drive. There may be only 512MB of RAM, but this is enough because the Eee PC runs a Linux-based streamlined operating

system. Linux has a reputation as being usable only by geeks, but the Eee PC is incredibly user-friendly and includes a wealth of essential programs.

While some of the applications can be a little slow to load from the hard disk, they run smoothly. There are six menus on the desktop, separated into different types of applications and functions (see box, right, for more). We were particularly taken with how easy it is to customise your favourite applications list. Using a simple two-menu program, you can pick your new favourite application from the list and drop it into the adjacent favourites menu. The Music Manager program makes it incredibly simple to organise your music collection, being more intuitive than iTunes or Windows Media Center, and you can store MP3s on a high-capacity SD card since there's an SD reader. There are similar programs to organise your photo collection, and for getting some work done there's OpenOffice 2, which is compatible with Microsoft Office.

The 701 has an internal 802.11g wireless adaptor, which can be easily set to find and connect to your wireless network automatically. Firefox and

SUMMARY

- ✓ Cheapest laptop ever
- ✓ WiFi and webcam built in
- ✗ No optical drive

ULTRA-PORTABLE LAPTOP PC 900MHz Intel Celeron M ULV, 512MB RAM, 4GB solid state hard disk, 7in widescreen LCD, 0.92kg
PART CODE EPC701
DETAILS <http://eeepc.asus.com/en>

PERFORMANCE (see page 66)



Also consider...

PC NEXTDAY Zoostorm 4-5628

★★★★★

£569 inc VAT

From www.pcnextday.co.uk

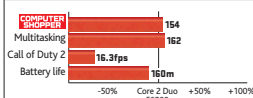

We'd normally expect a laptop this inexpensive to have a Core Duo or AMD Turion processor, but the Zoostorm 4-5628 has one of the latest Core 2 Duo processors. This means it's very quick. It's not suitable for playing modern games, though, unless you turn down the detail settings and resolution.

The 15.4in widescreen display has a glossy finish and a native resolution of 1,280x800 pixels. Image quality is high and it's evenly lit. The display is sturdy and barely flexes under pressure. Although the rest of the chassis is uninteresting to look at, it feels robust.

Surprisingly for a cheap notebook, the Zoostorm 4-5628 lasted two hours and 40 minutes in our light



LAPTOP PC Intel Core 2 Duo T7250, 1GB RAM, 120GB hard disk, Nvidia GeForce 8600M GS graphics, DVD+/-RW +/-DL, 15.4in widescreen LCD, 2.9kg
PART CODE 3384-5628
DETAILS www.pcnextday.co.uk
FULL REVIEW Jan 2008



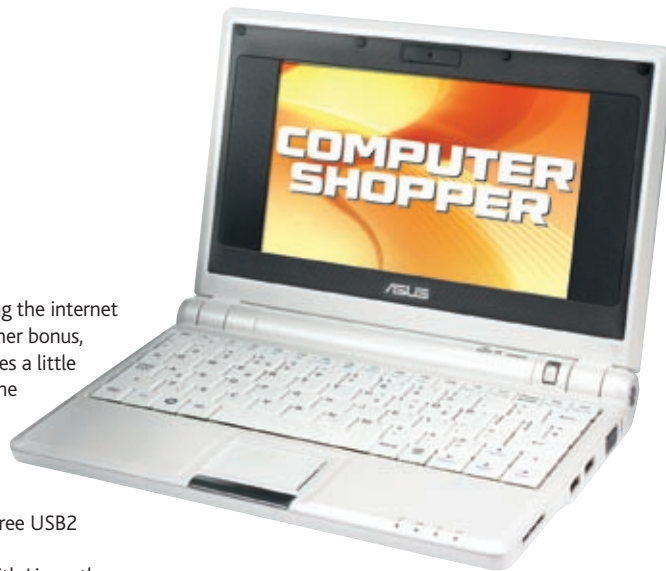
usage battery test, which is long enough for the occasional traveller or for use in the garden. It comes with Windows Vista Home Premium edition, so you can browse your media library with the Media Center function.

If you need a general-purpose computer and don't spend all day typing, the Zoostorm is a good and inexpensive choice.

Thunderbird are preinstalled for browsing the internet and email. The internal webcam is another bonus, although, like many webcams, it struggles a little with fast motion. The built-in microphone sounds good and relatively noise-free and, while the internal speakers lack bass, they are easily on a par with speakers in laptops costing three times the price. Around the edges there are three USB2 ports for plugging in peripherals.

If you don't fancy getting to grips with Linux, the Eee PC is capable of running Windows XP. The manual includes instructions on how to install it, and you can download drivers from Asus's website. If you can wait a few weeks, Asus has confirmed that Eee PCs will be available to buy with Windows preinstalled by early 2008. It's a nice touch that the website is as user-friendly and organised as the Eee PC itself, so if you have any problems with your computer, the answer shouldn't be far away.

If you intend to use the Eee PC on the move, be aware that battery life isn't the best we've seen. In our



tests, it lasted for three hours and 20 minutes, so you may want to invest in a second battery for around £40.

The Eee PC 701 is stunning. It may lack an optical drive, and the keyboard takes a bit of getting used to, but it offers a staggering amount for the price. Asus has also included all the components you're likely to want, such as the webcam and WiFi. It also comes in black for those who aren't fans of the white version. At just £209 including VAT the Eee PC is sure to fly off the shelves, so make sure you get one before Asus increases the price.

Matt Smith

Life without Windows Using Linux on the Eee PC

The Linux operating system in the Eee PC has six menus at the top of the screen, which contain shortcuts to applications. The Internet menu consists of links to applications such as Firefox and Google Docs, and also contains wired and wireless network settings. The Work menu comprises OpenOffice 2 applications for spreadsheets, documents and presentations, as well as a file manager and dictionary. In the Learn menu you'll find science, language and mathematical applications, while the Play menu organises all your

music, photo and other media files. Under the Settings menu you'll find controls for volume, date and time and sensitivity of the trackpad, as well as the add or remove software function.

To see the full range of open-source Linux programs available for the Eee PC, go to www.sourceforge.com. You will need to use the command line to install some of these applications. If you've never done this before, www.euser.com is a very helpful resource run by other Eee PC users who will be happy to help.

Seth Barton

DETAILS www.oneclickpower.co.uk

BYTE SIZE

ONECLICK Intelliplug

★★★★★

£15 inc VAT
From www.mediaatlantic.com



Reducing your electricity bill is certainly a good thing, both for the environment and your bank balance. The Intelliplug is a three-socket adaptor that helps you save money by not leaving your PC peripherals on standby.

You plug your PC into the master socket and peripherals into the other two. The Intelliplug can detect when you shut down your PC, and five seconds later it turns off power to your peripherals.

This is particularly useful if you have devices that don't have off switches, or if you're just not in the habit of using them. The amount of energy you'll save will depend on your particular peripherals, but simply switching off a monitor overnight should amount to more than the price of the adaptor within a year.

Seth Barton

DETAILS www.oneclickpower.co.uk

UNIROSS USB Charger

★★

£6.99 inc VAT
From www.mymemory.co.uk

We've seen AA batteries that connect to USB for recharging, but this is a USB charger with space for two AA or AAA batteries. Four 1,000mAh AAA batteries are included, making it seem a bargain.

However, it isn't. USB ports provide only 5V of power, so the charger can output 110mA. This means it takes 15 hours to charge two AAA batteries.

Unless you have a powered USB hub, you'd have to leave a computer on for all this time to charge the batteries. That's not only inconvenient, but will add to your electricity bill. The charger doesn't even switch off once the cells are charged. It's a great idea, but doesn't work in practice.

Jim Martin

DETAILS www.uniross.com



SAMSUNG Q45

★★★★★

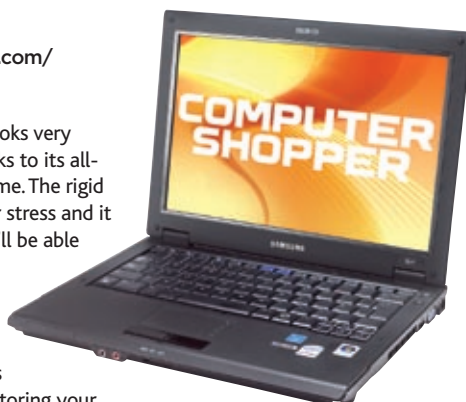
£731 inc VAT
From www.lambda-tek.com/components



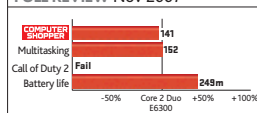
Samsung's Q45 looks very business like thanks to its all-black colour scheme. The rigid chassis doesn't flex under stress and it weighs just 1.9kg, so you'll be able to take it everywhere.

The keyboard doesn't flex when typing and is comfortable for long periods. Inside the chassis is a 160GB hard disk for storing your files. The 12.1in display has the same 1,280x800 resolution as most 15.4in displays, but the gloss finish reflects light from bright sources easily.

The large battery lasted a lengthy four hours and nine minutes in our light-use test, but protrudes 19mm at the back. The Core 2 Duo processor and



ULTRA-PORTABLE LAPTOP PC
Intel Core 2 Duo T7100, 2GB RAM, 160GB hard disk, Intel GMA 950 graphics, DVD+/-RW +/-DL, 12.1in widescreen LCD, 1.9kg
PART CODE NP-Q45A002/SUK
DETAILS www.samsung.com/uk
FULL REVIEW Nov 2007



2GB of RAM are fast enough for most tasks, but the integrated graphics chipset isn't suitable for playing 3D games.

It's an excellent choice if you want an inexpensive, smart and compact notebook for use on the move.

BYTE SIZE

ALTEC LANSING IM207

★★★★★

£30 inc VAT
From www.shop.bt.com

Altec Lansing's IM207 is a compact portable speaker powered by three AAA batteries. It has a single speaker cone, but is designed to create "a 360-degree sound field".

It works well, creating a sound that fills far bigger rooms than you'd expect from a speaker measuring just 3½in. Bass was predictably weak and some high frequency sounds were lost, but we were impressed by the volume and clarity of the sound.

The metal fascia rotates to switch it on, and a 3.5mm jack plug unfolds to connect it to a headphone socket. There are no other controls, and no mains adaptor. Sound quality could be better, but this pocket-sized speaker is well worth the money.

Kat Orphanides

DETAILS: www.alteclansing.com

SONY USB Active Speaker System

★

£37 inc VAT
From www.pcwb.com

Sony's portable USB Active Speaker System measures 170x60x24mm, with two small speakers on the front. It's designed to be used with your laptop. Audio is transferred via a 330mm cable, which wraps up and clips neatly inside the back of the unit. The plastic front cover slides back to act as a stand. Unfortunately, it detaches from the unit far too easily and we had to slide it back into place every time.

Disappointingly, sound quality was no better than the average laptop. There's plenty of volume but no controls on the unit itself, so you have to go back to your laptop to turn it up or down, which isn't ideal if it's tucked away in a bag. At £37, these speakers are vastly overpriced.

Matt Smith

DETAILS www.sonystyle.co.uk

SONY Vaio VGC-LT1S

★★★★★

£1,301 inc VAT
from www.dabs.com

Sony's Vaio VGC-LT1S all-in-one PC is one of the cheapest Blu-ray PCs we've seen and looks more like a giant digital photo frame than a computer. It's sleek and is around the same size as a standalone monitor.

Our LT1S was unable to play back any of our Blu-ray movie discs until we applied a BIOS update. Sony has assured us that this problem has already been fixed in units available for purchase. After applying the update our Blu-ray films played back flawlessly, but the integrated 22in widescreen monitor is an odd choice as it can only show high-definition (HD) video at 720p due to its resolution of 1,680x1,050 pixels. Fortunately, the screen is bright and evenly lit, making it well suited for watching movies and image editing.

Telly addicts will appreciate the remote control and two hybrid TV tuners which let you choose between digital or analogue reception, so you can record one channel while watching another. The 320GB hard disk is a bit too small if you want to record lots of TV and store all your programmes and documents, though. The built-in stereo speakers distort slightly at high volume and sound a little harsh but are good enough for videos and games. For better sound, you can connect a surround sound amplifier using the S/PDIF port.

The LT1S is powerful enough for more serious tasks thanks to its Core 2 Duo T7250 processor and 2GB of RAM. It did well in



our video- and image-editing benchmarks, scoring 215 and 172 respectively. You'll need to turn down the screen resolution and graphics settings when playing games, though, as the results of our 3D tests show. This isn't ideal if you want to play the latest games, but older titles should play fine.

Because of its compact size the LT1S doesn't have

PCI slots like other desktop computers, but it does have CardBus and ExpressCard/34 slots so you can add devices such as an eSATA adaptor. You won't need to add wireless networking, though, as it's already built in. As with other Sony computers we've seen recently, the generous software bundle includes useful titles such as Adobe Premiere Elements and Photoshop Elements.

The LT1S may be the cheapest Blu-ray PC we've seen, but it's still expensive. Unless you must have a Blu-ray drive, the almost identical Vaio VGC-LT1M costs £180 less.

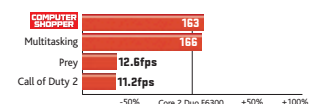
Alan Lu

SUMMARY

- ✓ Attractive and compact design
- ✓ Two TV tuners
- ✗ Expensive

DESKTOP PC 2GHz Intel Core 2 Duo T7250, 2GB RAM, 320GB hard disk, 256MB Nvidia GeForce 8400M GT, 2x hybrid TV tuners, BD-R/RE DVD +/-RW +/-DL
PART CODE VGC-LT1S
DETAILS www.sony.co.uk

PERFORMANCE (see page 66)



Also consider...

CCL Duo4400-CSP

★★★★★

£400 inc VAT
From www.cclonline.com

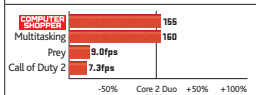
BEST BUY The Duo4400-CSP's case is compact, but there's plenty of room inside. The motherboard has all the slots you need to add extra memory, expansion cards or more storage. A memory card reader makes it easy to transfer digital photos to the roomy 320GB hard disk.

Unfortunately, it's not particularly quiet due to the loud processor cooler and graphics card fans.

The display can be rotated easily and it can be set at two different heights. Colours were a little oversaturated, though. A comfortable Microsoft keyboard and mouse are also included. The graphics card isn't quick enough to play modern games at high



DESKTOP PC Intel Core 2 Duo E4400, 1GB RAM, 320GB hard disk, 256MB XFX Nvidia GeForce 8400GS, DVD +/-RW +/-DL, 19in widescreen LCD
PART CODE DUO-4400-CSP
DETAILS www.cclonline.com
FULL REVIEW Dec 2007



detail settings, however, so you'll have to lower the resolution and detail settings. The Core 2 Duo E4400 processor is fast enough to take on most tasks, although more memory would help when editing video or running multiple applications.

The Duo4400-CSP is an impressive all-round system at this price.

BYTE SIZE

TWINMOS

Mobile Disk B1 4GB

★★★★★

£30 inc VAT

From www.urboom.com

The 4GB Mobile Disk B1 is one of the smallest USB flash drives we've seen. It's about the size of two 20p coins and is only a little thicker. It doesn't feel fragile, but a carry case would have been useful.

The B1 did fairly well reading files in our data-copying tests, but was slow at writing them. It read large files at 14.34MB/s and small files at 8.52MB/s. Large files were written at a sluggish 3.71MB/s and small files were written at a dismal 0.17MB/s.

The B1 is impressively spacious for its size, but it's not as fast or as cheap as SanDisk's 4GB Cruzer Micro, which costs around £10 less.

Alan Lu

DETAILS www.twinmos.com

APC

Universal Notebook Battery 50

★★★★★

£79 inc VAT

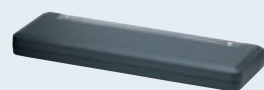
From www.brettcmmms.co.uk

APC's Universal Notebook Battery 50 aims to add to your laptop's battery life. Its wide range of adaptors fit most models, but check the website to make sure it will work with yours before you order.

APC says the battery will last up to four hours depending on the laptop, with ultra-portables faring the best. In our tests we found that around three hours was average. It also takes the same amount of time to charge from the mains.

The battery weighs under 1kg, which isn't too much extra weight to carry around. If you don't want to pay over the odds for a second battery from your laptop manufacturer or can't get hold of one, then this is well worth the money.

Matt Smith

DETAILS www.apc.com


VERYP

GreenPC 940 BE

★★★★★

£415 inc VAT

From www.very-pc.co.uk

The average PC consumes more power than you might think, and that's bad for the environment as well as your electricity bill. VeryPC's GreenPC 940 BE is designed to consume considerably less power than a standard PC. The energy-efficient GreenPC is also whisper-quiet, while power-hungry PCs tend to be distractingly noisy.

The GreenPC uses energy-efficient components such as a 2½in laptop hard disk and a low-power version of AMD's dual-core Athlon processor. As a result, it wasn't particularly fast in our application benchmarks. It's more than fast enough for everyday office tasks, though, and managed a respectable score of 177 in our video-editing test. However, high-definition video clips stuttered during playback, and it also proved unsuitable for playing demanding games.

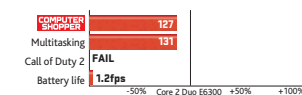
A typical £600 PC (see *Labs*, page 78) consumes 84W when idle and around 120W when running our demanding benchmarks suite. By contrast, the GreenPC uses only 34W when idle and around 70W when working flat out. This may sound impressive, but Apple's Mac mini, reviewed last month, uses even less power: only 20W when idle and around 50W when churning through our benchmarks. This is because it uses laptop components throughout (including the mobile Core 2 Duo T7200 processor), while VeryPC's Athlon processor and memory are desktop PC parts. We tested the Mac mini with Windows XP and Vista installed and found that power consumption was no different than it is with MacOS X, so even if you're averse to MacOS, the Mac mini is a greener PC.

SUMMARY

- ✓ Low power consumption
- ✓ Upgradeable
- ✗ Poor performance

DESKTOP PC 2.1GHz AMD Athlon X2 BE 2350, 1GB RAM, 100GB hard disk, ATI Radeon X1250 graphics, DVD+/-RW +/-DL
PART CODE N/A
DETAILS www.very-pc.co.uk

PERFORMANCE (see page 66)



The Mac mini is smaller, too, but the GreenPC still uses less desk space than a standard midi-tower. Another advantage is the potential for future expansion. The GreenPC 940 BE can accommodate two full-height PCI cards and a full-height PCI-E x16 graphics card, although length is limited. There's even enough room to add a second optical drive, a 3½in hard disk and a memory card reader. Upgrades could make the GreenPC noisier and almost certainly reduce any savings, though, as they'll consume more power.

The 100GB hard disk is large enough for storing office documents but is small by today's standards. Alongside the D-sub output is an HDMI port so you can connect the GreenPC to an HDTV or a DVI-equipped display with an appropriate adaptor.

Like the Mac mini, the GreenPC is sold without a monitor, mouse or keyboard, which are available from VeryPC's website. However, the Mac mini is vastly better looking, uses less power and can run Windows, so it's the better choice.

Alan Lu

Also consider...

RL SUPPLIES

Modula 4400 OC

★★★★★

£800 inc VAT

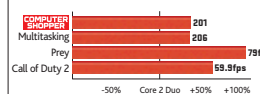
From www.rlsupplies.co.uk


If you're looking for a cheap gaming PC, RL Supplies' Modula 4400 OC could be just what you're looking for. It comes with a large 22in widescreen monitor, the perfect size for playing the latest games. It didn't do so well in our demanding image tests, however, so you'll need a better-quality monitor for tasks such as image editing.

The GeForce 8800GTS graphics card is superb and handles all today's games at high resolutions and detail settings. It's DirectX 10-compatible, too, so you'll be able to play newer games that require this technology as they become available. It achieved the



DESKTOP PC Intel Core 2 Duo E4400, 2GB RAM, 320GB hard disk, 640MB BFG Nvidia GeForce 8800GTS, DVD+/-RW +/-DL, 22in widescreen LCD
PART CODE SYSMOD4400-OC
DETAILS www.rlsupplies.co.uk
FULL REVIEW Sep 2007



highest scores in our Prey and Call of Duty 2 benchmarks in our recent group test of gaming PCs. With a fast Core 2 Duo E4400 processor and 2GB of RAM, the Modula is great for other intensive tasks, such as video editing.

With its large monitor, great speakers, fast graphics card and sensible keyboard and mouse, the Modula 4400 OC is a great gaming PC.

BYTE SIZE

THRUSTMASTER Dual Trigger 3 in 1 Rumble Force

★★★★★

£17 inc VAT
From www.amazon.co.uk



As well as working with your PC, this wired USB joystick is compatible with the PlayStation 2 and 3. It's easy to set up and allows you to map keyboard presses to buttons and store configurations for your favourite games.

The controls are identical to a PlayStation pad, but there are two extra analogue triggers on the underside, which are handy for driving games. The pair of analogue sticks could use more resistance though, and the shoulder buttons weren't very responsive.

It's well built but wasn't very comfortable to hold for long periods. If you need a pad with PlayStation compatibility it's a good buy, but otherwise the Microsoft Xbox 360 Controller for Windows is a far better choice.

Matt Stafford

DETAILS www.thrustmaster.com

LOGITECH Cordless Trackman Optical

★★★

£41 inc VAT
From www.rlsupplies.co.uk



Trackballs are more ergonomic than a mouse as you move the ball with your fingers to control the cursor, rather than moving the whole device. Logitech's Cordless Trackman Optical trackball connects to your computer wirelessly, but it's not as accurate and responsive as a USB trackball.

The awkward position of the scroll wheel and the chunky casing make the Trackman uncomfortable to use for long periods. The buttons are responsive, though, and the useful drag-lock button allows you to drag and drop files without continuous right clicking. The Trackman isn't unusable, but it's too inaccurate and expensive.

Alan Lu

DETAILS www.logitech.com

CHOOSING A... PC System

Follow the steps to find your ideal specs

PROCESSOR Intel Pentium Dual Core E2140

MEMORY 1GB

HARD DISK 250GB

STORAGE 18X DVD writer

SOUND Integrated

SPEAKERS Stereo

GRAPHICS Integrated

MONITOR 19in widescreen LCD

EXTRAS memory card reader

CONNECTORS 4x USB2, network

SOFTWARE Windows Vista Home Premium

BASICS Keyboard, mouse

Recommended minimum in grey

1 The minimum specification of PC we recommend, shown in grey above, is a good starting point when working out your ideal system. This PC would cost around £500 and is perfectly capable of running everyday office, multimedia or education software, as well as doing anything on the internet. But it's an unexciting PC. It will be able to play DVD movies, but they won't sound too impressive and modern games are a no-no.

2 The size and shape of a PC is more important than it used to be. A mini PC costs a bit more and it's less upgradable, but it will take up less desk space and look much more attractive. If you're choosing a media centre PC, make sure you get one that fits in with any other electronic equipment in your living room and that it's quiet.

3 If you are interested in games, upgrade to a decent graphics card. Budget cards based on the Radeon X1900 graphics processor will cope with this year's games, but to play next year's just as smoothly (and enjoy gorgeous graphics today), you'll want anything up to an Nvidia GeForce 8800 GTX.

Look for an SLI or CrossFire system if you want to use two graphics cards to get the best graphics performance. Even if you don't want SLI or CrossFire now, it may be worth getting a system that's capable of being upgraded later.

4 The processor above is powerful and it's dual core, so it will handle intensive tasks. If you're going to be doing a lot of video editing, you should consider upgrading to an even more powerful processor. Intel's Core 2 Duo range is our current top choice; as well as being more powerful, it needs less cooling so your PC should be quieter.

5 If you're not interested in games, you can definitely live with integrated or cheap graphics, but there are plenty more reasons to upgrade the memory, hard disk or processor. If you'll be using your PC for serious desktop publishing, music or photo-editing tasks, you need the same kind of processor, memory and disk space as for games. For video editing consider getting two hard disks, perhaps in a RAID array.

6 A quality sound system will enhance all manner of

PC activities. To hear the surround soundtrack of a DVD at its best, you'll need a quality 5.1 speaker system. Games can also use such a system to throw sound effects around you.

If you're not interested in games or DVDs (or you don't want to trail wires all around the room), go for a quality stereo pair with a subwoofer to boost the bass instead.

If you want to listen to music or want better-quality sound, you'll need to invest in a dedicated sound card. As well as providing enhanced sound, such as Environmental Audio eXtension (EAX), which tweaks the acoustics to make sound appear to be playing in different environments, you'll get higher-quality outputs and more inputs.

7 All but the cheapest PCs now come with widescreen monitors. As well as being ideally suited for watching movies, they feel more natural for working on panoramic photos or expansive spreadsheets.

Non-widescreen 17in LCDs are inexpensive, but not very exciting and quite small. An 19in widescreen LCD is now standard and has a resolution of 1,440x900 pixels. Larger 20in and 22in LCDs are available from around £200 and have a higher resolution of 1,680x1,050. This makes them better for those who want to work with complex applications.

Decide if you want a glossy display or not. Glossy displays improve contrast and make images look brighter, but they reflect overhead lights and sunlight easily, which can be annoying.

8 The standard set of connectors can be improved with extra USB2 ports, to which most run-of-the-mill PC gadgets attach, and a FireWire port for fancy gadgets including most digital video (DV) cameras. Look for a memory card reader if you have a digital camera and make sure your camera's memory card is supported.

9 Windows Vista Home Premium is preinstalled on most new PCs. Any extra software bundled should be assessed critically. It may be that you'll never use it. But you may find a PC that includes software you'd otherwise have paid for, so you'll save lots of money by having it preloaded.

10 If you have money left over, consider a TV card. This lets you watch TV on your PC screen and record programmes to your hard disk, and some can capture analogue video from a camcorder.

